NOAA CLIMATE PROGRAM OFFICE

Upcoming Events: 2008 Ocean Sciences Meeting Orlando, FL. March 2-8 - On March 5 Dr. Margarita Gregg, Director of the National Oceanographic Data Center (NODC), will host a Town Hall titled, NODC: An Ocean of Data on your Desktop; Climate Predictions and Applications Science Workshop (CPASW), Chapel Hill, NC. March 4-7; Climate Information for Managing Risks, St. Pete Beach, FL. June 10-13; Status of Drought Early Warning Systems in the United States, Kansas City, MO. June 17-19

SPOTLIGHT: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) AND ALBERT GORE JR. RECEIVE NOBEL PRIZE

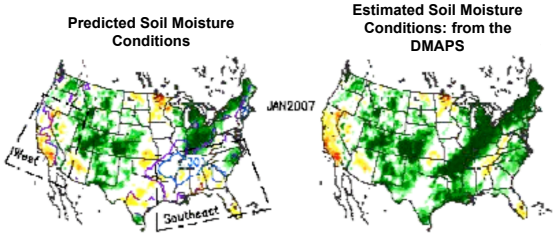
The development of the IPCC assessments over the past two decades was formally recognized when the Norwegian Nobel Committee announced that the Nobel Peace Prize for 2007 would be shared between the IPCC and Albert Gore Jr. for "their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change."

NOAA scientists are among the thousands of researchers in many fields who have authored and contributed to the creation of the reports published by the IPCC since its inception in 1988. The fourth and most recent assessment report, released in 2007, contained numerous model simulations, research, observations, and data analyses produced by NOAA scientists, labs, and partners. The Geophysical Fluid Dynamics Laboratory (GFDL) contributed two climate models (CM2.0 and CM2.1) and a half-year of super-computing time to produce climate simulations for the report. In addition, many NOAA scientists have been center stage in the leadership of the IPCC assessment endeavors such as Dr. Susan Solomon, a senior scientist at the Earth System Research Laboratory (ESRL), Co-chair of the IPCC's Working Group I since 2002.

Twenty-five representatives of the IPCC including two NOAA scientists, Dr. Solomon and Dr. Daniel L. Albritton, (former Director of the Aeronomy Laboratory and the Chemical Sciences Division of ESRL), attended the awards ceremony in Oslo, Norway on December 10. Dr. Solomon was also invited to a Presidential ceremony held at the White House.

The recognition of the IPCC's work by the Nobel Committee work is the highest international honor. NOAA's participation in the IPCC since its inception highlights the agency's commitment to working with the global scientific community to deliver policy-relevant scientific information to national and international decision-makers. *(For a complete list of all NOAA individuals involved in IPCC work visit: http://www.oar.noaa.gov/news/2007/IPCCcontributors.html) (Source: Chris Ennis, Maria Setzer, NOAA News)*

Monitoring and Predicting the 2007 U.S. Drought. A recent study on the early 2007 drought in the Western and Southern region of the US tested the newly developed Drought Monitoring and Prediction System (DMAPS). This system will provide near real-time monitoring and prediction of drought, an invaluable tool for drought preparation and impact assessment at national to regional scales. The DMAPS uses the North America Land Data Assimilation System, the Variable Infiltration Capacity model, and seasonal climate forecasts from the National Centers for Environmental Prediction (NCEP) Climate Forecast System (CFS) for providing quantitative assessments of drought. The Climate Program Office (CPO) Climate Prediction Program (CPPA) supported the development of the DMAPS. A paper on this work is highlighted in the Geophysical Research Letters (Luo, L., and E.F. Wood, 2007). *(Source: Annarita Marrioti) (The figure identifies the predicted soil moisture conditions by the DMAPS on the left and the estimated conditions on the right.)*

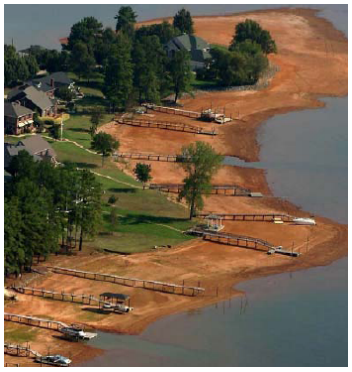


32nd Annual Climate Diagnostics and Predication Workshop. In late October, The Climate Prediction Center (CPC) held the annual Climate Diagnostics and Prediction Workshop in Tallahassee, Fl. The workshop provided focused discussions on improving climate outlooks, climate monitoring, and the application of climate forecasts. In addition, there were special sessions on the application of CPC climate outlooks in

the Southeastern U.S., defining climate extremes, and the state of El Niño prediction. Over 175 climate scientists from across the country attended the workshop. The Florida State University's Department of Meteorology and Center for Ocean-Atmospheric Predictions Studies (COAPS) co-hosted the workshop. *(Source: Wayne Higgins) (For more information visit: http://www.cpc.noaa.gov/products/outreach/CDPW_32.shtml)*

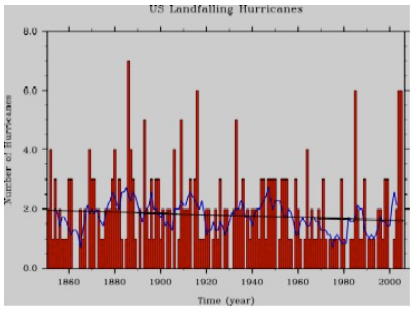
Authors of the Climate Change Science Program (CCSP) Synthesis and Assessment Product (SAP) 1.1, Temperature Trends in the Lower Atmosphere, received the Department of Commerce 2007 Gold Medal for Scientific/Engineering and Achievement. SAP 1.1 was the first in a series of SAPs to be published. *(Source: Chris Miller)*

Scientists Awarded for Service in Climate Science. Key NOAA-supported researchers received all five of the first-ever California Department of Water Resources (DWR) awards for Climate Science Services. The purpose of the awards is to recognize ongoing assistance provided by members of the academic community who have been working closely with DWR on planning for climate variability and change. The awards were presented at DWR's Climate Change Water Adaptation Summit in October. All five award recipients are leaders or key members of the CPO Regional Integrated Sciences and Assessments (RISA) teams. Awards such as this provide an opportunity to highlight NOAA's support for providing climate science research for informed decision making on a regional level. *(Source: Caitlin Simpson)*



New Research on the Widening of the Tropical Belt. Air Resources Laboratory scientist Dian Seidel recently published two papers which present recent observational studies that indicate a widening of the tropical belt (defined using a variety of meteorological indicators) over the past quarter century. In addition, model simulations suggest that the tropical region may continue to widen over time. The research highlights several factors that may be contributing to this widening, such as warming sea surface temperatures, stratospheric ozone depletion, El Niño, and stratospheric climate changes. Dr. Seidel worked with scientists from the University of Washington, the National Center for Atmospheric Research, and the University of Utah. This research is presented in two papers, Nature Geoscience and the Journal of Geophysical Research. *(Source: Steve Fine and NOAANews).*

Global Warming Could Reduce Number of U.S. Landfalling Hurricanes. NOAA scientists at the Atlantic Oceanographic Meteorological Lab (AOML) recently authored a research publication, which shows that global warming may decrease the likelihood of U.S. landfalling hurricanes. Observations over the past 153 years indicate that the warming of the sea surface is associated with a sustained long-term increase of tropospheric vertical wind shear in the region where Atlantic hurricanes develop. It is this increased wind shear, which coincides with a weak but robust downward trend in U.S. landfalling hurricanes, that is a reliable measure of Atlantic hurricanes over the long term. Warming over the tropical oceans compete with one another for affecting Atlantic hurricane activity. Indian and Pacific Ocean warming increase vertical wind shear whereas tropical North Atlantic warming decreases vertical wind shear. Warming in the Indian and Pacific oceans win the competition and this increased wind shear, could result in fewer U.S. landfalling hurricanes. Whether future global warming increases Atlantic hurricane activity will probably depend on the relative behavior induced by warming over the three tropical oceans. This paper is published in the Geophysical Research Letters. *(Source: Dr. Chunzai Wang, AOML)* (*Figure shows the number of U.S. landfalling hurricanes from 1851 to 2006. The black straight line is the linear trend that is fitted to the U.S. landfalling hurricane time series. The blue line is the seven-year running mean of U.S. landfalling hurricanes.)*



CPO Grant Program Presents at the 2008 American Meteorological Society (AMS) Meeting. The Transition of Research Applications to Climate Services (TRACS) Program made several presentations at the 2008 AMS Annual Meeting. The broad theme of the meeting was "Enhancing Connectivity between Research and Applications for the Benefit of Society". Josh Foster (TRACS Program Manager) gave two presentations at different Symposiums, to highlight the history and priorities of the TRACS program and the obstacles of transitioning research into operational settings. Two TRACS funded projects, one on the development of a seasonal ice forecast tool and the other on linking seasonal forecasts with storm surge warnings in Long Island, NY, were also presented as examples of projects in transition. To learn more about the TRACS program visit the CPO website, http://www.climate.noaa.gov. *(Source: Josh Foster)*

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